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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/030,002

03/19/2002

Jean-Jacques Caboche

3-1032-170

5740

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7590

10/23/2006

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EXAMINER

GHALI, ISIS A D

ART UNIT

PAPER NUMBER

1615

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/030,002	Applicant(s) CABOCHE ET AL.	
	Examiner Isis Ghali	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-24 and 31-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-24, 31-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The receipt is acknowledged of applicants' amendment, filed 08/02/2006.

Claims 1-18 and 25-30 have been canceled. Claims 19-24 were previously pending. Claims 31-37 have been added.

Claims 19-24 and 31-37 are currently pending and included in the prosecution.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 19-24 and 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,454,161 ('161).

US '161 teaches a branched glucose polymer and a method for producing a branched glucose polymer by reacting an amylaceous substance with a branching enzyme, by means of conversion of an alpha-1,4 glucan into alpha-1,6 by branching in order to produce a structure similar to that of glycogen or an amylopectin, i.e. no β -bonds (col.1, line 10 till col.2, line 4), and thereby to enhance the qualities of the food products into which they are incorporated and, in particular, to prevent retrogradation of the amylaceous material in these food products. US '161 teaches that the branching enzymes can come from animal, plant or microorganism sources (col.1, lines 52-56). US '161 teaches that a solution of an amylaceous substance, such as starch, amylase, or amylopectin prepared by gelatinization and dispersion, is thus exposed to the branching enzyme, and is then mixed with the desired food products after concentration and drying (col.2, lines 11-16). US '161 teaches temperature 25⁰ C is suitable for the enzymes (col.6, lines 45-48). Further the reference teaches in example B-4 temperature of 140⁰ C to 145⁰ C to perform the branching process. Example B-4 teaches one-step method for heating the starch and adding the branching enzymes. The product produced by the process is food product containing amylaceous substance selected

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from amylose, amylopectin, starch, or dextrin (col.10, claim 9). Starch mainly contains α -glucosidic bond.

However, the reference does not teach the conditions of performing the process with regard to pressure and time. The reference does not teach the properties of the glucose polymer as claimed in claim 31.

No patentable distinction between the present invention and the prior art except for one step method instead of the two-step method instantly claimed. The final product of the present invention is not distinguished from that of the prior art and have the same property of lacking β -bonds and capable of performing the same function of preventing retrogradation of amylaceous substances in food products.

The specific conditions regarding pressure and time do not impart patentability to the claims, absent evidence to the contrary.

Regarding the properties of the glucose polymer recited in claim 31, the glucose polymer produced by US '161 that lacks β -bonds is expected to have the same properties as instantly claimed because the chemical compound and their properties are inseparable.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to prepare branches glucose polymer containing no β -bonds using branching enzymes as disclosed by US '161, and adjust the conditions of production of the glucose polymer according to intended use, with reasonable expectation of having glucose polymer capable to prevent retrogradation of amylaceous material in the food products.

Response to Arguments

4. Applicant's arguments filed 08/02/2006 have been fully considered but they are not persuasive. The main gist of applicants' argument is US '161 does not teach treating the starch derivatives with the time, temperature and pressure as instantly claimed by claim 19. Claim 19 requires high temperature and pressure for relatively short time.

In response to this argument, it is argued that US '161 disclosed temperature of 140⁰ C to 145⁰ C, and it is obvious that processing under higher pressure will shorten the time as using the regular pressure cooker. The product produced by the process of US '161 is similar to the present product which is glucose polymer containing essentially no β -bonds and suitable for food products. It is well established that merely selecting modifying the process conditions such as temperature, reaction time and concentrations is not a patentable modification absent showing superior and unexpected results. *In re Aller* 220 F.2d, 454, 105 USPQ 233 CCPA, 1995; *In re Becket*, 33 USPQ 33, CCPA, 1937; and *In re Russell*, 439 F.2d 1228, 169 USPQ 426, CCPA 1971.

The burden is on applicants to show that the conditions of the claimed process resulted in novel and unobvious difference between the claimed product and prior art product since the Patent Office does not have the facilities for preparing the claimed materials and comparing them with the prior art inventions. See *In re Best*, 562 F.2 1252, 195 USPQ 430 (CCPA 1977); and *In re Fitzgerald et al.*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

Regarding the issue raised during the interview held on June 28, 2006 about the term "starch derivatives", it is argued that the specification does not set forth the metes and bounds of the term because it is not clear what are the starch derivatives that are suitable to practice the present process and what are the starch derivatives that have the properties claimed in claim 31.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isis Ghali whose telephone number is (571) 272-0595. The examiner can normally be reached on Monday-Thursday, 7:00 to 5:30.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isis Ghali
Examiner
Art Unit 1615

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